

Application No.: 09/755714

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REMARKS

Claims 1, 4-16, 18-19, 22-27, and 31-33 are pending. Claims 1, 10, 15, 18, 22, and 27 are amended.

Allowable Subject Matter

Applicants appreciate the Examiner's indication that claims 10, 15, 18, 23, and 27 are allowed. These claims have been amended to be put into independent form including all the limitations of the base claim and any intervening claims. Therefore, Applicants respectfully request that the objection to claims 10, 15, 18 and 27 be withdrawn, and the claims be allowed.

103 Rejections – Claims 1, 4-9, 16, 22, 24-26

Claims 1, 4-9, 11-14, 16, 22, 24-26, 31-33 stands rejected under 35 USC § 103(a) as being unpatentable over US 5,640,002 (Ruppert et al.) in view of US 4,827,395 (Anders et al.).

In the Response to Arguments Section in the Office Action, the Examiner stated, "it is noted that the features upon which applicant relies (i.e., displaying the location of the sought object relative to the location of the interrogation area) are not recited in the rejected claim(s)." Applicants believe that independent claims 1, 22 and 24 do recite displaying the location of the sought object relative to the location of the interrogation area. However, to help clarify the claims of the invention, Applicants have amended independent claims 1, 22, and 24 to recite the following:

a user interface in which a *representation* of an *interrogation area* is shown on the display as a *first graphical component* of the user interface, and a *representation* of an *item of interest* is shown on the display as a *second graphical component* of the user interface *relative to the first graphical component to indicate a location of the item of interest within the interrogation area.* (emphasis added)

These amendments are supported by the specification, for example on page 4, lines 11-15 and lines 19-33, page 5, lines 5-18, and page 6, lines 14-28.

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With these amendments, Applicants believe that the independent claims of the invention are more specific about "displaying the location of the sought object," as requested by the Examiner. The independent claims now state "a representation of an item of interest... shown... as a second graphical component." Also, Applicants believe that the independent claims of the invention are more specific about "displaying the location of the ... object relative to the location of the interrogation area," as requested by the Examiner. The independent claims state " a second graphical component (i.e., representation of the item of interest) ... relative to the first graphical component (i.e., the representation of the interrogation area) to indicate a location of the item of interest within the interrogation area." As a result, Applicants believe independent claims 1, 22, and 24 are allowable over Ruppert et al. in view of Anders et al. Applicants encourage the Examiner to call Applicants' representative, Melissa Buss, if these amendments to the claims do not address the issues set out in paragraph 2 in the Response to Arguments Section of the Office Action, because to some degree, paragraph 2 is somewhat confusing and Applicants wish to address the Examiner's concerns.

Applicants are presenting essentially the same arguments below as were presented originally in the Office Action Response filed on November 9, 2004, with some added clarifications.

The Office Action stated, "Ruppert does not disclose 'showing on the display an item of interest as a second graphical component relative to the first graphical component indicating a location within the interrogation area.'" Applicants respectfully point out that Ruppert also does not disclose, teach, or suggest "a user interface in which a representation of an interrogation area is shown on the display as a first graphical component," as recited in claim 1, for the reasons in the Office Action Response faxed on May 11, 2004.

The Office Action also stated that "Anders et al. ... is relied upon to teach such features as shown in figure 29, for the purpose of locating objects within an interrogation area (Anders, col. 36, line 36-61; col. 37, lines 11-26). Clearly, the graphical depiction of the location of an object within an interrogation area in the display of Anders et al. provides a visual representation to a user of where an object may be located." Applicants respectfully disagree for at least the following reasons.

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In regard to independent claims 1, 22, and 24, Anders et al. does not disclose, teach or suggest a user interface in which a *representation of an interrogation area* is shown on the display as a *first graphical component* and a *representation of an item of interest* is shown on the display as a *second graphical component* relative to the first graphical component to *indicate a location of the item of interest within the interrogation area*. Anders et al. does not teach showing a *representation of an interrogation area* on the display as a first graphical unit. Instead, Anders et al. (in col. 26, lines 36-61) teaches an X, Y, and Z axis projection on the display 354, the position of the hand-held unit displayed as a "U" and the position of the lost object displayed as an "O." Anders et al. (in col. 37, lines 11-26) teaches tracing the movement of the object, displaying distance, time and speed. As a result, Anders et al. is displaying the location of the sought object relative to the location of the hand-held reader, not relative to the representation of the interrogation area. Therefore, Anders et al. does not teach a *representation of an interrogation area* shown on the display as a *first graphical component*. In addition, Anders et al. does not teach displaying an item of interest as a second graphical component *relative to the first graphical component to indicate a location of the item of interest within the interrogation area*.

In contrast, two embodiments of the present invention are illustrated in Figure 4 and Figure 2, including a user interface in which at least one graphic associated with the item of interest may be presented on the display for observation by a user. For example, if the scanned area is a single book shelf, the first component of the user interface may be a longitudinal bar graphic such as that shown in Figure 4 at 110, and the second component may be a highlighted portion of the bar as shown at 112. If the scanned area consists of multiple book shelves, as shown in Figure 2, then the first component of the user interface may be a graphical representation of multiple book shelves as shown at 130, and the second component may be a highlighted portion 132 of that graphic.

Therefore, independent claims 1, 22, and 24 recite elements not shown, taught, or suggested by the cited references, whether taken alone or in combination, and should be allowable. Claims 4-9, 11-14, 16 and 19, which depend from claim 1 and add further limitations, should also be allowable. Claims 25-27, which depend from claim 24 and add further limitations, should also be allowable. Applicants respectfully request the rejection of claims 1,

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4-9, 11-14, 16, 19, 22, and 24-27 under 35 U.S.C. § 103(a) of Ruppert et al. in view of Anders et al. be withdrawn.

In addition to the arguments presented above, claim 24 includes another limitation that makes it patentable over Ruppert et al. in view of Anders et al. Claim 24 includes the recitation of including "at least one light that is illuminated when an RFID tag is interrogated." This feature is not shown, taught, or suggested by the cited references, whether taken alone or in combination. However, Applicants believe that claim 24 is allowable over Ruppert et al. in view of Anders et al. for at least the arguments presented above.

In the Response to Arguments Section in the Office Action, the Examiner stated, "a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art" and that "the visible or audible indication of Ruppert relates to bar codes." Claim 24 does include a structural difference from Ruppert et al. Ruppert et al. does not include a light that is illuminated when an RFID tag is interrogated, as recited by claim 24.

The Office Action states in regard to claim 24 that it includes "at least one light for providing information to the user." For the second time, Applicants respectfully point out that claim 24 does not include such a recitation. (This was brought to the Examiner's attention already in the Office Action Response filed on November 9, 2004.) Instead, claim 24 is as follows:

24. An RFID reader comprising:

- (a) an RFID interrogation source;
- (b) a processor;
- (c) a display; and
- (d) a user interface in which a representation of an interrogation area is shown on the display as a first graphical component of the user interface, and an item of interest is shown on the display as a second graphical component of the user interface relative to the first graphical component to indicate a location within the interrogation area and including at least one light that is illuminated when an RFID tag is interrogated, wherein the RFID interrogation source is coupled to the processor and the processor is coupled to the display.

Ruppert et al. does not show, teach or suggest including at least one light that is illuminated when an RFID tag is interrogated. Instead, Ruppert et al. teaches that if the read of a bar code was good, then there is a visible or audible indication of a good read. (See, Ruppert et al., column 60-64.) In fact, this audible indication of a good read is taught by Ruppert et al. only

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as it relates to bar codes, not as it relates to RFID tags. Ruppert et al. teaches that when RFID tags do not have a good read, a number of retries is attempted and then if the maximum numbers of retries has occurred, then block 1413 is performed to shut down the RFID tag reader. (See, Ruppert et al., column 29, lines 30-43.) Ruppert et al. does not show, teach, or suggest illuminating one light when an RFID tag is interrogated.

Anders et al. does not disclose, teach, or suggest including at least one light that is illuminated when an RFID tag is interrogated. Instead, Anders et al. teaches using light, sound, and vibration as a "pointer." Anders et al. teaches that if the unit were being used for horizontal location, and the object was off to the right, the right buzzer would sound louder, vibration would be greater and/or light would be brighter. The converse is true if the item being sought were to the left. If the object were straight-ahead, the lights, vibration, and sound levels would be equal. (See Anders et al., column 36, line 62 through column 37, line 2.) Anders et al. makes no mention whatsoever of repeatedly producing an audio signal at a desired interval to pace a user as to the speed at which the RFID tags should be interrogated.

Therefore, for this additional reason, independent claim 24 recites elements not shown, taught, or suggested by the cited references, whether taken alone or in combination, and should be allowable. Claims 25-27, which depend from claim 24 and add further limitations, should also be allowable. Applicants respectfully request the rejection of claims 24-27 under 35 U.S.C. § 103(a) of Ruppert et al. in view of Anders et al. be withdrawn.

Claim 19 stands rejected under 35 USC § 103(a) as being unpatentable over Ruppert et al. in view of Anders et al., and further in view of U.S. Pat. No. 6,318,636 (Reynolds et al.). Claim 19 depends from claim 1. Claim 1 is patentable for the reasons give above. Therefore, claim 19, which depends from claim 1 and add further limitations, should also be allowable. Applicants respectfully request the rejection of claim 19 under 35 U.S.C. § 103(a) of Ruppert et al. in view of Anders et al. and further in view of Reynolds et al. be withdrawn.

The rejection of claims 1, 4-9, 11-16, 19 17, 22, and 24-27 under 35 USC § 103(a) as being unpatentable over Ruppert et al. in view of Anders et al. has been overcome and should be withdrawn.

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103 Rejections – Claims 31-33

In regard to independent claim 31, there is no specific discussion anywhere in the Office Action about claim 31. This is the second time that Applicants have pointed this out to the Examiner. (The Office Action Response filed on November 9, 2004 also pointed this out.) Even if Applicants presumed that section 9 of the Office Action should have referred to claim 31, instead of claim 30 (which was previously cancelled), the text in section 9 only refers to "showing on the display an item of interest as a second graphical component relative to the first graphical component indicating a location within the interrogation area." Applicants respectfully point out that claim 31 does not include such a recitation. Instead, claim 31 is as follows:

31. An RFID reader comprising:

- (a) an RFID interrogation source;
- (b) a processor;
- (c) a display; and
- (d) a user interface that displays an indication in a measurable unit of how far away from an item or location of interest an item currently being interrogated is located, wherein the RFID interrogation source is coupled to the processor and the processor is coupled to the display.

Accordingly, the applied rejection is believed to be faulty and a prima facie case of obviousness has not been established. If the Examiner proposes to provide any reasoning supporting the rejection then Applicants respectfully request a second non-final Office Action be issued, so that Applicants may learn what that reasoning is and reply to it. Therefore, Applicants respectfully request the rejection of claim 31 under 35 U.S.C. § 103(a) of Ruppert et al. in view of Anders et al. be withdrawn.

The rejection of claims 31-33 under 35 USC § 103(a) as being unpatentable over Ruppert et al. in view of Anders et al. has been overcome and should be withdrawn.

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Withdrawal of the outstanding rejections and allowance of the pending claims is respectfully requested. Reconsideration of the application is requested. If a telephonic conference would be helpful in resolving any outstanding matters in the present application, the Examiner is encouraged to contact applicants' undersigned representative.

Respectfully submitted,

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